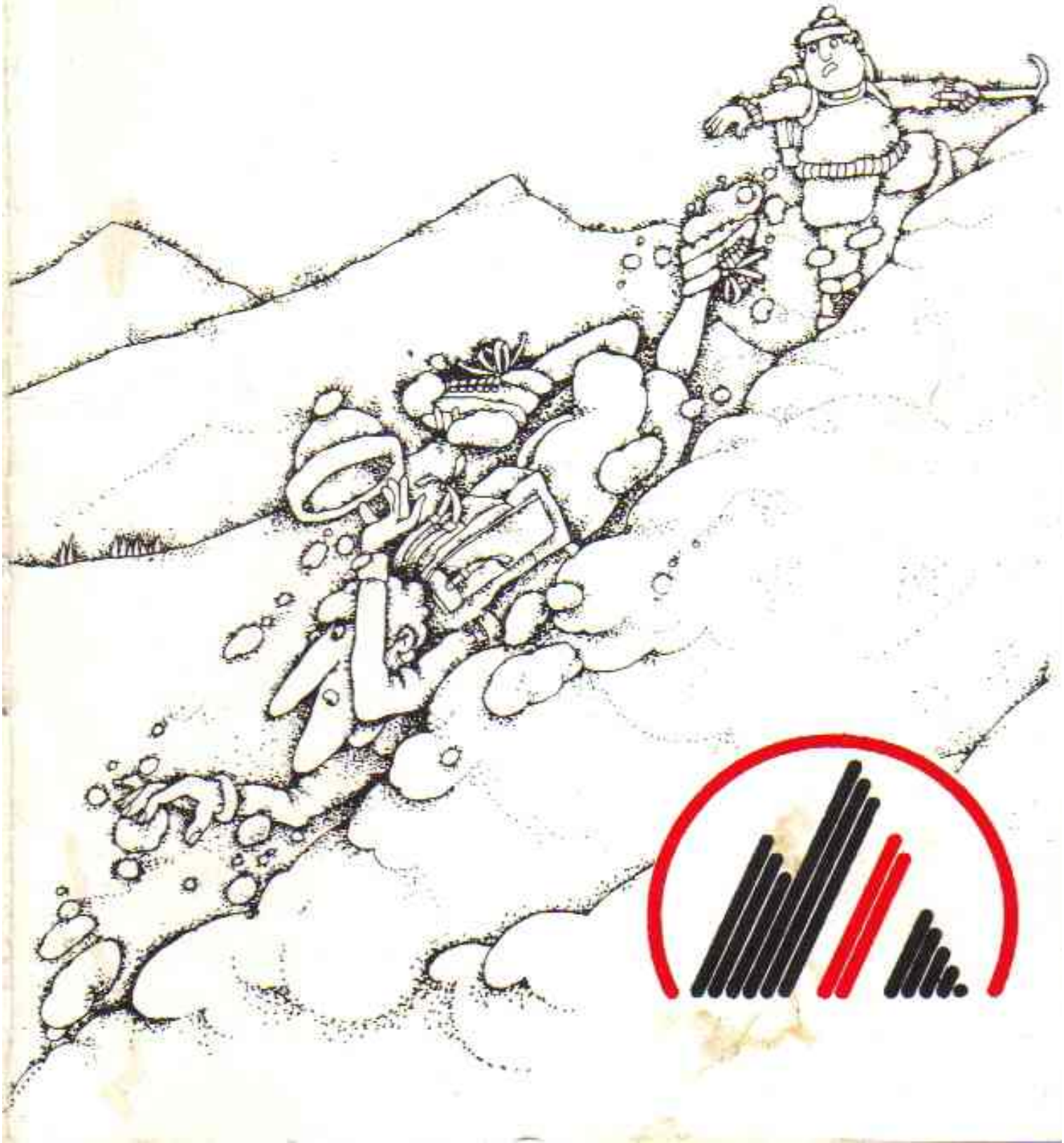
Safety on Mountains



The Country Code

All users of the mountains should observe the Country Code, which runs:

- **Guard against all risks of fire**
- **Fasten all gates**
- **Keep dogs under proper control**
- **Keep to paths, across farmland**
- **Avoid damaging fences, hedges and walls**
- **Leave no litter**
- **Safeguard water supplies**
- **Protect wild life, wild plants and trees**
- **Go carefully on country roads**
- **Respect the life of the countryside**

Safety on Mountains

By John Jackson and other members of the staff of Plas y Brenin National Mountaineering Centre.

Revised by John Jackson and J. R. Lees on behalf of the BMC Safety Committee 1974.

Published by
British Mountaineering Council,
Crawford House, Precinct Centre, Manchester University,
Booth Street East, Manchester M13 9RZ

Produced and Distributed by Cordee
249 Knighton Church Road, Leicester

Illustrated by Reg Cartwright

The publication of this booklet was recommended by the Outdoor Activities Advisory Committee of the CCPR on which the following organizations concerned with mountain safety are, among others, represented:

The British Mountaineering Council
The Ramblers' Association
The Camping Club of Great Britain and Ireland
The Youth Camping Association
The Ski Club of Great Britain
The Outward Bound Trust
The Youth Hostels Association of England and Wales
The CHA
The Holiday Fellowship
The Workers' Travel Association
The Boys' Brigade
The Scout Association
The Girl Guides' Association
The National Association of Boys' Clubs
The National Association of Mixed Clubs and Girls' Clubs
The National Association of Youth Service Officers

The Duke of Edinburgh's Award Office and the Scottish Youth Hostels Association have also welcomed its publication.

Published in association with
The Royal Society for the Prevention of Accidents

Printed by Joseph Ward & Co. Ltd., Dewsbury

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Foreword

by The Rt. Hon. Lord Hunt, CBE, DSO, DCL, LLD

The growing number of young people who visit our mountains in search of exercise and adventure is a welcome sign. But in accepting the element of risk it is important to be quite clear about the nature of the dangers inherent in mountain travel and to go prepared. To get lost in the mountains, or to be the cause of an accident involving yourself or other people when this could have been avoided by training and preparation, is not heroism but folly. Indeed, it is worse than foolish for it shows a complete lack of consideration for others.

Most people would agree that the point in any leisure activity is to find pleasure and satisfaction. In mountaineering, these are to be found not in courting unknown hazards but in matching your own skill and experience against the danger and difficulties of which you are aware. This booklet summarizes for you the basic principles and the important lessons to be learnt from the experience of many mountaineers. It does not go into the techniques of rock climbing, nor does it touch on the vast store of knowledge needed to become a master of the problems posed by snow and ice on mountains. But you will find information about what to read if you want to learn more.

I hope that it will help you in the difficult task of joining skill with courage and prudence with daring.

Mountain Walking

The object of this booklet is to give you some information about how to find your way around our moors, hills and mountains in most kinds of weather in safety. Those who have done some enjoyable hill-walking without bothering much about equipment, map-reading and so on, may wonder what all the fuss is about. But the fact is that every year people die or are injured in our hills because they do not appreciate that these hills can at times be both difficult and dangerous and they did not take the trouble to learn how to deal with these potential dangers.

Weather can change quickly; what started as a pleasant stroll on a fine day up a well-trodden path can turn into a battle against a blizzard. In winter-time the chances of this happening are much greater; the well-trodden path of summer-time may be a sheet of ice in winter.

The sensible course is always to be properly equipped and prepared for any type of weather and to know how to cope with the various situations that may arise. Experienced hill walkers and mountaineers always treat our hills and mountains seriously. If the inexperienced walker does not do so, he is taking a silly and unnecessary risk.

Not all our hills are on the same scale. In Scotland, for example, the distances are longer, the country more rugged and lonelier, and the weather, if it turns bad, can be far harsher. In winter-time, especially, the conditions are often Artic and great care indeed is required.

Walking alone in the hills can be enjoyable but it always

involves greater risk. Do not go out in the hills alone until you have had much experience of walking in different types of country and in different weathers. Even when you are competent you must take special care if you go alone, and remember the difficulties which will arise if you have even a minor mishap - difficulties not only for you but for those who will have to come to look for you.

In this chapter we look at the art of mountain walking and in particular preparation, equipment and walking skills.

'Be prepared and well equipped'

SAFETY FACTORS

Good, sound equipment is the first essential and the following points should be noted carefully.

Footwear

Walking shoes, gym shoes or basket ball boots are *not* suitable for mountain walking since they provide little support for the ankles or protection for the foot on rough ground.

Boots are essential but they need neither be very expensive nor very heavy. A good boot for mountain walking should be fairly broad for its size and have a good heel. This will reduce the risk of twisted ankles. The sole should be strong and slightly flexible for easy walking. Most boots now use composition rubber so use a reputable mountaineering sole and *not* an industrial sole which may grip well in oil but not on mossy and wet rock. With composition rubber soles be careful on hard snow or ice, on steep wet grass and on mossy or greasy rocks. If nailed boots are used be sure to keep the nails in good condition.

Socks. Wear one or two pairs of socks or stockings. Keep them in good condition, put them on smoothly and see that they fit well. A spare pair of socks is useful for a dry change.

Clothing

Air is a good insulator and it is a good basic principle to use clothing that will trap pockets of air.

Underwear. A woollen or string vest under a long woollen shirt and two medium-weight long-sleeved woollen jerseys will probably be found most satisfactory. Between the different layers of clothing, pockets of air will be trapped and so act as insulation from the cold outside.

Trousers. Ordinary flannel, woollen or 'cord' trousers are quite adequate; jeans are unsuitable as there is little warmth in them and corduroys, when wet, have the disadvantage of taking an extremely long time to dry out. Many people wear shorts but trousers or breeches are preferable. If shorts are worn, you should also carry a spare pair of light over-trousers. Trousers give much better protection if the weather turns bad or if you are out after dark. In bad weather conditions, waterproof over-trousers worn over the other pair give excellent protection. Eventually you may wish to buy specially made climbing breeches but these are not essential. Snow gaiters are a useful addition in either Summer or Winter, in heather and brush, or in snow. Zip up gaiters are the easiest to put on and take off.

Anarak or windproof. This is an essential piece of equipment to keep out the wind and prevent it from removing the pockets of stale warm air and continuously replacing them with cold air that drains away heat energy. It should have a hood, a large zipped map pocket, good long sleeves and be long enough in the body to sit on. In our *wet/cold* climate the material should be windproof and as waterproof as possible. Remember that plastic materials in particular have little friction in the event of a slip on steep wet grass or on snow.

Gloves. Gloves with only one compartment for the four fingers may be found warmer than the ordinary kind. They should also have long wrists. Windproof outer mittens made of canvas or leather are essential in winter conditions.

Headgear. Warm headgear is essential in winter and can be either the traditional woollen Balaclava or a simple woollen cap worn with a scarf to keep the neck and ears warm.

Spare emergency clothing. Most people with a will to live will be able to survive an unexpected night out in winter if they have with them the following spares: a pair of woollen gloves, a pair of woollen socks, a woollen jersey, a pair of light trousers or windproofs and a polythene bag (500 gauge 8ft. × 4ft.) or ground-sheet (See illustration on p. 33).

This is the bare minimum and for mountaineering in snow or bad weather conditions it is a worthwhile precaution to take a sleeping bag or down jacket.

Food

Make sure you have a good breakfast before you set out, take something nutritious for your lunch, and always carry some emergency rations such as chocolate, glucose tablets or barley sugar, mint cake and dried fruit which, although neither heavy nor bulky, have a high calorific value. Treat these as emergency rations and not just as an extra snack.

First Aid Kit

Always carry a first aid kit. It should contain a selection of bandages, gauze or lint for dressing, Elastoplast, aspirin and antiseptic cream. (See also Chapter 6 on First Aid.)

Map and Compass

Carry a map of the area in which you are walking - either 1:50,000 or 1:25,000 in scale - and a good compass, either a prismatic or a 'Silva' type. Most important, know how to use the map and compass and have a clear idea of the general trend lines of the mountain ranges and valleys.

The map. Smaller scale maps than those recommended have insufficient detail to be suitable for mountain walking. Check the date on which the map was published, for the magnetic variation changes by ½° every four years. Knowing the correct magnetic variation is essential when con-

verting grid bearings to magnetic.

The compass. The most practical compass for mountain navigation is the 'Silva' type for this combines a compass needle, protractor and a ruler, all essential for accurate map and compass work.

Map reading. It is outside the scope of this booklet to teach the rudiments of map reading, but before venturing into the mountains it is essential that you should:

- Be able to give four-figure and six-figure grid references for any point on the map and know the meaning of all conventional signs, symbols and letters found on the map.
- (These are listed on most Ordnance Survey maps.)

- Know the meaning and local names for such topographical features as 'spur', 'ridge', 'col', 'crags'. (See Appendix III.)

'A sense of direction is for the birds - trust your compass!'

● Understand how the relief of the country is shown on your map so that you can tell the shape and steepness of any peak or feature. Contour lines are the most valuable and accurate way of showing this. Practise reading these in detail as much as possible and check the difference in height between the contour lines on your map.

● Learn how to measure distances on the map and estimate the time any route will take. Naismith's Rule is a good rough guide. Take speed of travel as 3 mph and add half an hour for each 1,000 ft of ascent. When carrying a heavy load use 2½ mph plus one hour for every 1,500 ft of ascent.

●The Ordnance Survey are introducing their first series of 1:50,000 maps over a period from 1974 to 1976 but these maps show contour lines as on 1 in OS maps, i.e at 50ft intervals, with thicker ones every 250 ft. However these contours are numbered at 15 or 16 metre intervals (50 ft = 15.24 metres). Therefore Naismith's formula can be converted in the two ways below, to suit individual preferences.

1 Distance 4 Km per hour (or 1 Km in 15 mins).
Plus height 100 metres in 10 mins (or loaded parties/with children: 100 m in 15 mins) (J. M. Mills).

2 Distance (as above) 1 Km in 15 mins or 100 m in 1½ mins.
Plus Height 250 ft in 10 mins or 25 ft per min. (P. J. Lawrence).

The second formula has the advantage of using existing contour intervals which are familiar and can be counted easily on 1:50,000 and 1:25,000 maps, so long as the metric numerals on the lines are ignored. (Note this is for loaded parties, or gives time to enjoy the environment).

It may be of interest to mention that 'inch and a quarter' or '1:50,000' can be spoken easier as '2 cm' (2 centimetres to 1 Km) and the 2½ inch called a '4 cm' map.

Compass navigation. You should know:

- How to set your map so that it corresponds with the natural features around you.
- How to obtain a bearing from the map, change it to a magnetic bearing and then walk on it, but allowing for the lie of the land.
- How to take a magnetic bearing in the hills and how to identify a feature on the map from such a bearing.
- How to pinpoint your own position by taking cross-bearings.

Remember:

- It is better to rely on the compass than your own sense of direction.
- Metal objects and photographic exposure meters close to the compass will affect the magnetic needle.
- Check your compass periodically for accuracy.

Route Planning

Plan your route beforehand; do not over estimate your party's or your own capabilities. Note compass bearings and those for bad weather escape routes. Include estimated time for each 'leg' on your 'route card' and have this handy if cloud approaches.

Another copy of your route card can be left with a reliable contact at your home, school, base, etc. In some areas it *may* be possible to leave written details at a local Police Station, mountain rescue post or information centre, but do not expect people to want to record the route of every visitor each day! This measure must be prearranged and self cancelling (unless you are overdue the route card will not be needed).

Weather

British mountains are small by comparison with most mountain masses in the world and all too often this leads people into a false sense of security. Remember that because of close proximity to the sea, and particularly along the west coast, weather in British mountain areas is far less predictable than in most other places in the world. Years of local knowledge gained from careful observation can often provide an accurate weather pattern in mountain country *but* 'red skies at night' and 'creaking bone' believers are in for many unpleasant surprises.

Weather forecasts. The Meteorological Office provides free information on request. Forecasts are as accurate as possible but there may be local disturbances and, in any event, they describe the overall pattern; their application to British mountains should therefore be made with discretion. The forecasts are almost always correct, however, when the prediction is for bad weather. Useful information can usually be obtained from the following sources:

Meteorological Office and RAF stations
Television broadcasts
Radio (*small* transistor on long expedition!)
Newspaper forecasts

However, local weather can be quite different from that forecast.

In conclusion, just as the British mountains are all too frequently underestimated because of their 'smallness', so too is the climate encountered among them. Weather conditions on British mountains, especially in winter, can be just as severe as, and often more severe than, those found in the Alps, and even more changeable. It is, therefore, safer to assume that the worst conditions may occur.

Temperature. Although not always so, it is usual to find that air temperatures drop as one ascends, and it will be several degrees colder on the tops. This drop in temperature is called the 'lapse rate' and it varies with humidity between 3° and 5° Fahrenheit a thousand feet. Warm valleys often lead to chilly peaks, where your spare clothing will be needed, particularly at halts.

Wind. The wind often blows more strongly in higher places and any wind speed has the same effect on the body as a fall in temperature. This increases the 'lapse rate' mentioned above but your windproof clothing will protect you effectively.

Rain. The wind blowing over wet or damp skin and clothing causes a further lowering of temperature which, combined with the lapse rate, creates cold comfort for the unprepared mountain party.

August, October, November and December are usually the wettest months in British hills.

Visibility. Poor visibility can easily lead to being 'benighted', and heavy rain can be the cause of poor visibility just as much as thick cloud. Constantly refer to your compass in such conditions and make progress cautiously. If you are on a path, follow it carefully and watch out for cairns. Take every opportunity to identify an object. If you have to travel on a compass bearing, stop frequently and each time take a sight on an object ahead. An alternative is to send a companion ahead of you twenty yards or so at a time. The sighting should be made while both parties are stationary. Remember also that one can lose all sense of time on a long walk. Carry a watch and allow plenty of time to finish your expedition in daylight.

Freezing conditions. When valley temperatures are low,

freezing conditions will frequently be found on upper mountain slopes. Freezing drizzle or rain and low clouds can easily coat a ridge or the easiest paths with rime or treacherous ice, and such ice-covered terrain can be very difficult and dangerous. If there has been a fall of snow, ridges and similar exposed mountain areas can possibly be 'corniced'. Boots soled with composition rubber can be dangerous in freezing conditions and plastic overtrousers and anaraks can be dangerous in the event of a slip on steep grass, frozen ground or snow slopes.

Blizzard. The worst of all conditions met with in our hills are combinations of wind and snow giving blizzards, which can be of great ferocity. This is the time to return to the valley by the quickest but safest way.

Electrical storms. Electrical storms as opposed to thunderstorms are not very frequent in the British Isles but it should be borne in mind that electric potential will be attracted to ridges, summits and other high points, and it is advisable to keep below them during a storm.

Get as far down the mountain and away from exposed ridges as possible.

- Sit yourself with knees drawn up and feet together on dry clean rock. If you have a rope or insulating clothing, sit on this.
- Avoid caves and dirt-filled crevices. Don't sit under trees and in small hollows. Choose an area away from walls and spires.
- Take precautions quickly.

Warning signs of electrical storms may be hair rising or a buzzing sound from camera, ice axe, or the rock ridge.

River Crossings

Heavy rain will cause flooding and make streams rise

rapidly into dangerous torrents, sometimes washing away bridges, parts of footpaths and covering fords. Do not attempt to cross such streams in spate. River crossings are not to be undertaken lightly and if there is any doubt at all either (i) MAKE A DETOUR or (ii) WAIT until the spate or flood subsides.

If an occasion arises where in extremity it is decided that crossing a river in NORMAL flow is the safest of several alternatives, then it is best to observe a routine procedure as follows:

Preparation:

- Remove trousers to reduce friction or drag. They can be put on dry at the other side.
- Wear boots when fording a river. Socks should be taken off and put on dry at the other side.
- Undo the waist band of a pack and loosen shoulder straps for quick off-loading. Empty billies and closed polythene bags should be placed at the top of the pack to provide buoyancy.
- Make use of a branch or pole for a 'third leg'.
- Secure from the bank. A rope should always be used. Each individual making the crossing should be attached to the rope, thus forming a safe link with the group on the banks of the river.

Choice of crossing:

- It is most often safest between bends. Bends can be very dangerous because at the outside curves the water is deep, currents are powerful and frequently banks are undercut.
- The bottom is often good and the water shallower between rapids, though this is not always true. Certainly the water is less turbulent.
- The water is usually shallower and the flow slower where the river widens.
- The safest crossing point will often prove to be where

the river splits into several channels.

- If possible get a viewpoint from above the river, for other hazards are revealed that cannot be seen from the horizontal.

Crossing:

- The leader of the group should check that individual preparations have been carried out correctly and that each person crossing is made secure from the bank.
- Avoid jumping from boulder to boulder. This is a very dangerous procedure.
- Make short shuffling steps for steady progress, endeavouring to maintain 'three point' contact at all times.
- Crossing on a diagonal is recommended, i.e a 'downstream and across' approach.

The above brief guidelines are given rather than none at all but the best general advice that can be given about river crossings is AVOID THEM. They are extremely dangerous and should only be attempted in the extreme case of necessity, and only then if a rope link with the bank is possible.

WALKING SKILLS

Good judgement and skill in movement are obviously of great importance for safety. Certain principles of movement in mountains are the basis of both walking and climbing, resulting in safe movement and in a conservation of energy which is precious in mountains. It is a good axiom to train oneself to start the day steadily without rushing and to increase the pace only when the body is felt to be functioning well.

- Keep a steady rhythmical pace. Look for level spots on which to place the feet and, to conserve energy, keep the arms still. Doing this and moving from one level foot-placing to another develops good balance. 1,200 ft an hour

of ascent is a steady Alpine pace; 1,600 ft an hour is a good pace once the body is functioning well.

- When placing the foot, the whole of the foot should be in contact with the ground, *not* just the toe; thus the thrust upwards comes from the strong thigh muscles and those of the stomach.
- Do not wear more than is necessary or get too warm - this in itself can be exhausting. Be careful to put on extra clothing at halts, which should not be too frequent.
- Avoid loose stones. They spoil rhythm and balance and can be caused to fall on other walkers below. Take short steps on such awkward uneven ground.

Other points useful to the individual walker are to be found in the notes for mountain walking parties below. Note particularly those referring to scrambling.

Walking in Parties

Additional points to be borne in mind by parties walking in the mountains are:

The Leader

- Chooses route, sets pace, and is responsible for the party. He appoints someone to bring up the rear to ensure that no one is left behind. The leader should not let anyone go ahead except by decision. If they do even when it seems safe, he is losing control and not fulfilling his responsibility.
- Carries spare clothing, map, compass, whistle, torch, first aid kit, emergency rations, polythene bag (not less than 500 gauge, 8 ft × 4 ft) and a length of No. 2 nylon rope - 100 or 120 ft. This should only be used in emergency, e.g, someone finding the terrain difficult. It must *never* be used to take a short cut over rocks not really suitable for walkers.
- Leaves word with a responsible person of intended route and expected time of return or arrival.

- Maintains a pace suitable to the slowest member, and reduces halts to a minimum to avoid breaking rhythm.
- Waits after obstacles to re-form the party and ensures that the party never separates.

Rear man

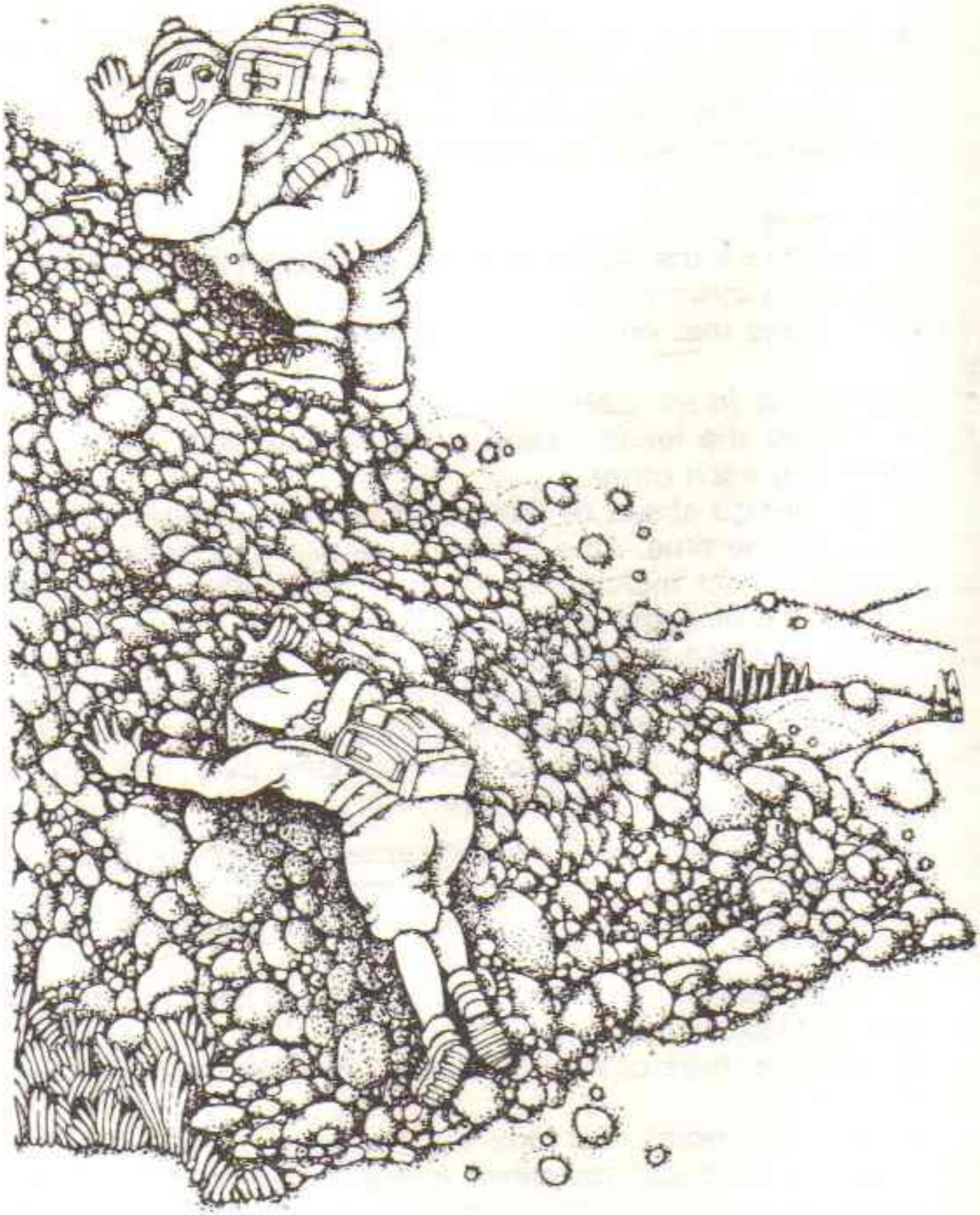
- Brings up the rear and warns the leader if the party is becoming strung out.
- Ensures that no one is left behind.

Individuals in the party

- Follow the leader, keep a rhythmical pace and avoid crowding each other.
- Do not go ahead of the leader or break away from the party at any time. One common cause of accidents with parties is that individuals separate and either get themselves lost or come to grief on difficult ground.
- Always take an intelligent interest in your surroundings and in the route. Not only is the journey far more enjoyable if you are alert and observant rather than watching your feet, but you may have to share, or take over, the job of leading the party at some time.

When scrambling and walking remember the following:

- Avoid crowding each other on the rocks.
- Watch where you place your feet and keep your heels down.
- Stand upright, away from the rock, and keep handholds low to help keep this position.
- Maintain three points of contact, moving only one limb at a time.
- Test your holds and look out for loose rock. Knocking loose rocks down on those below is another common cause of accidents. If a stone is knocked down shout *below* as loudly as possible to warn others.
- Follow your leader's route. Retrace your steps if you feel insecure and work out the footholds and handholds in advance.



'Think of others in the party when ascending scree - and keep close together'

- When descending or ascending scree, the position of individuals should be staggered so that rock falls cannot injure anyone. A close formation in a shallow arrowhead is safe.
- Try not to lose height either as an individual or as a party, except to avoid difficult rocks.
- If a party is overtaken by nightfall in cold and wet conditions some sort of shelter should be looked for.
- Do not throw stones or anything down a mountain or cliff.

Walking in Winter

All the foregoing points apply to winter walking in snow conditions, but remember that more clothing is required and even greater care must be used when moving on steep ground. The limitations of certain types of footgear are even more pronounced, particularly those with composition rubber soles.

Ice axes should be carried and used by each person. Learn the proper techniques of using this equipment and the methods of safeguarding each other. Be sure you know the method of braking with an ice axe in case of a slip.

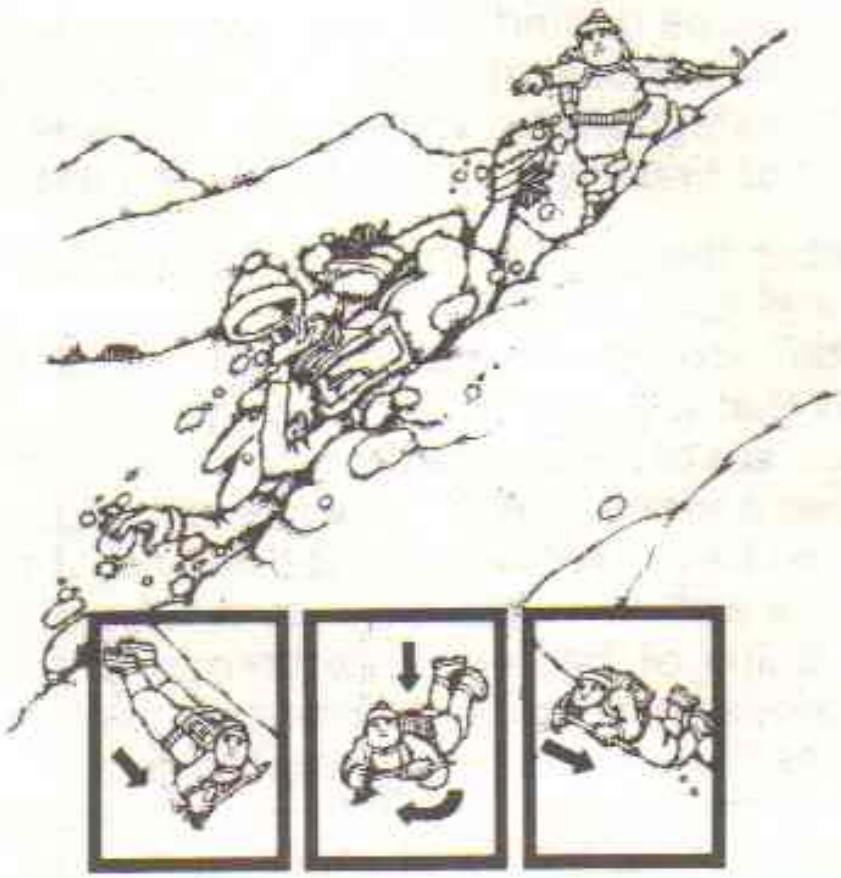
- Remember there will probably be ice beneath the snow wherever a stream normally flows.
- In winter, storms are more frequent and days much shorter, so that it is easier to be benighted.
- Cornices, lips of overhanging snow, may be encountered on the ridges and the tops of gullies or the edge of a scarp. These should be treated with great care and, if traversing a cornice, keep well down the slope to windward away from the lip. The line of fracture on a cornice is much farther down the slope than the inexperienced think. Remember that cornices may eventually avalanche and, if ascending to a cornice, the margin of safety must be increased.
- Watch out for the balling of snow on the feet. A kick or a tap with the ice axe shaft will often remove the ball of

snow but in doing this don't jerk yourself off balance on a slope.

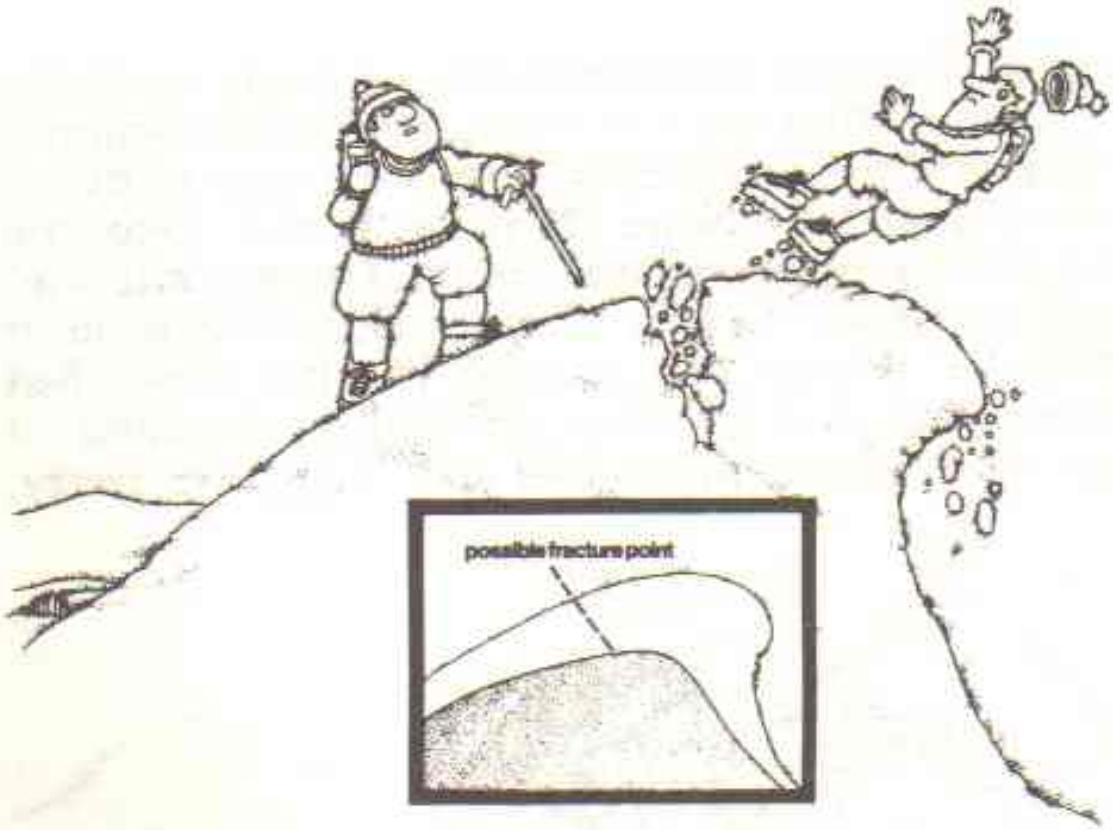
- Keep away from gullies and steep snow slopes during a thaw. In fact, if you have no experience of snow and ice climbing, keep away from gullies altogether and if you should take up snow and ice climbing, as opposed to walking in winter conditions, it is important to learn from someone with experience. Some of the books mentioned in the bibliography (Appendix II) will also add to your knowledge.

Other points to watch

- Mountain streams have numerous waterfalls or often fall over crags, so avoid them as a means of descent.
- British hills have mostly been glaciated in the past and in glaciated country the mountain spurs have often been truncated or cut by the moving ice, thus ending in steep cliffs. Take care when moving in conditions of poor visibility.



'Practice stopping with your axe before you need to!'



'More of a cornice breaks away than you think'

- If a ridge you have been following to a summit suddenly stops as a steep cliff, it is probably a 'false' ridge or spur from the ridge, e.g, Spur of Clogwyn y Person from Crib y Ddisgl (Snowdon).
- It is dangerous to contour slopes below a ridge in mist for it is easy to lose direction and there is a tendency to lose height. An increase of air pressure on the ear drums can often warn the walker of this.
- At night time it can be extremely useful to tell direction from the North Star, or other easily identified stars. If using stars on a compass bearing, change the star in use every fifteen minutes. North and South can easily be told from the moon and there are many other useful aids. See the bibliography. *Nature is your Guide* is a very good book on natural navigation.
- If lost - or in doubt - stop, keep calm, think back to your last known position and work out a plan before committing yourself to a line of action. Don't be afraid to turn back in face of adverse conditions if it seems wisest to do so.

Remember: **Carry the essentials in the pack - suitable spare clothing, first aid kit, map, compass, whistle, torch and emergency rations. Learn the International Distress Signal (see page 35 para 3) and also the position of mountain rescue posts. The whistle and torch will be useful to give distress signals in case of accidents or if you are caught in the dark. But remember also that careless whistling, shouting or flashing of a torch might call out a rescue party.**

'Short cuts might be too quick!'

Rock Climbing

A discussion of the techniques of rock climbing and of the safety precautions essential is outside the scope of this booklet but the following points should be noted carefully:

- Rock climbing cannot be learnt purely from books. It is essential to be taught by someone with experience or to go on a proper training course. Information on training centres and clubs can be obtained from the BMC/MLTB office at Crawford House, Precinct Centre, Manchester University, Booth Street East, Manchester 13.
- Ropes and equipment used for rock climbing must be of the very best quality. A No. 4 Nylon climbing rope of $1^3/_8$ in circumference, to BSI standard 3104 or 11 mm kernmantel rope to the UIAA Standard should be used.
- Rope handling, i.e knots, belay methods, use of belts and harnesses etc, can be learnt thoroughly prior to climbing and then used practically to the best advantage.

National Centres
Courses in rock-climbing are provided at the two Centres, Plas y Brenin and Glenmore Lodge. For information and bookings write to the following addresses:

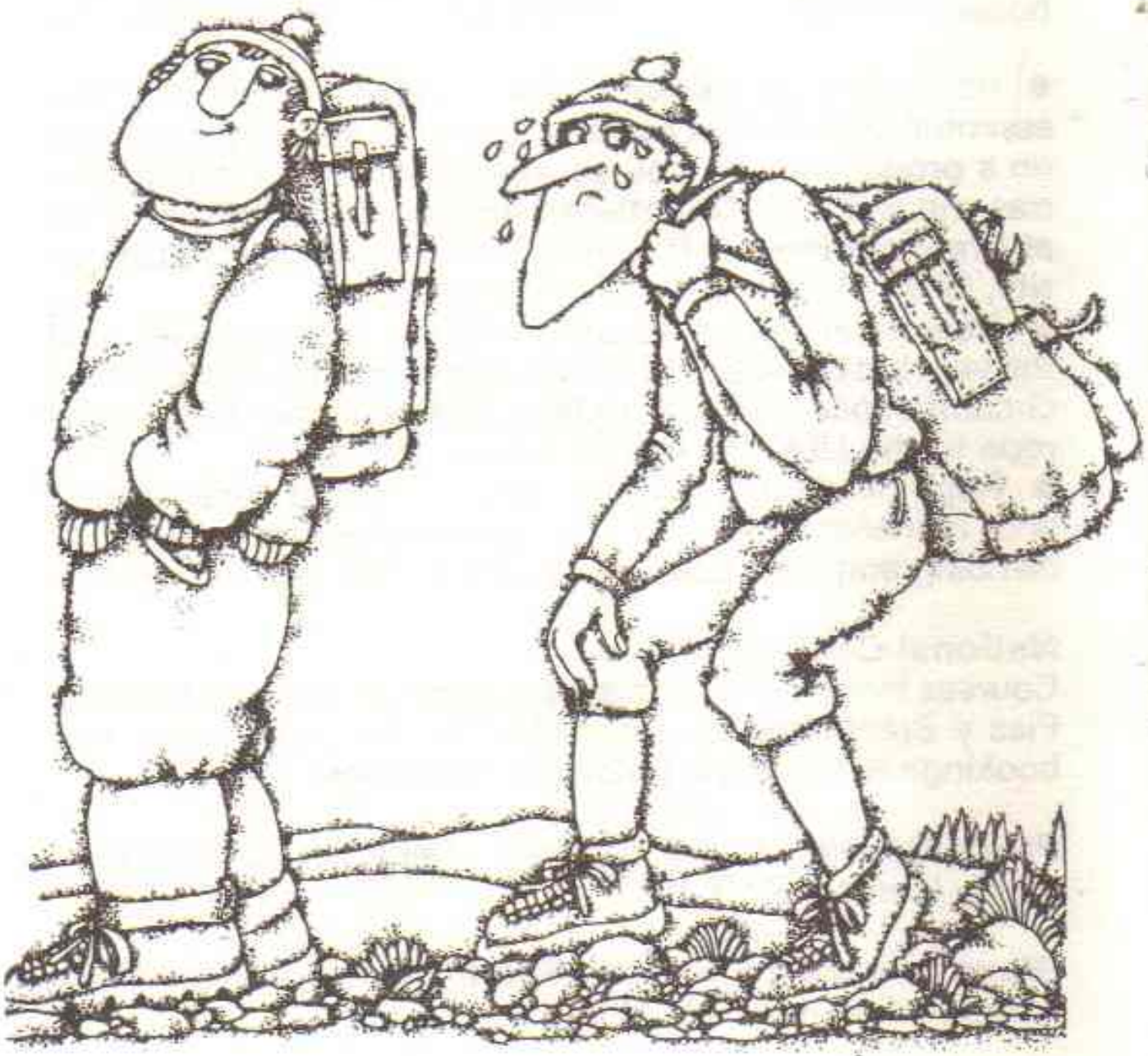
Plas y Brenin, Sports Council, Dept B, 70 Brompton Road, London SW3 1EX.

Glenmore Lodge, Scottish Sports Council, 4 Queensferry Street, Edinburgh EH2 4PB.

Many other centres and organisations provide courses and a list can be obtained from the BMC Head Office.

British Mountaineering Council Guides.
A list of BMC Guides and their scale of charges is obtainable from the BMC Head Office.

Other Sources of Information.
For information on books and films apply to the BMC Head Office.



'Keep the weight high and close to the spine'

Mountain Camping and Load Carrying

Camping may be considered by some as outside the scope of a booklet on safety in mountains. However, a lesson can be learned from the experiences of a party in Snowdonia in winter time which camped in exposed conditions. One tent after another burst in a tremendous gale until only two tents were left standing, producing a situation of considerable danger. If one of the two remaining tents had burst, the party would have been faced with either a retreat in the dark over difficult ground or a night spent huddled under what fabric of the tents was left.

Safety Precautions in Camping

Choose a sheltered site, especially in winter or bad weather, and pitch your tent with door to leeward. Check your site thoroughly, for shelter in mountains is often illusory and a poor shelter will increase buffeting and create turbulence in really bad weather.

Do not camp high up in the mountains unless you have a really good mountain tent. The best type is one with A-shape poles at either end contained in sleeves, a sewn-in ground sheet and a snow valence which can be held down with rocks. Tent pegs can be held down by rocks but first protect the guys with grass or turf to prevent chafing.

Avoid ground where rain or flood water may accumulate: this can happen surprisingly quickly with heavy rain.

Bear in mind the risk of fire and be careful with cooking stoves, candles and cigarette ends.

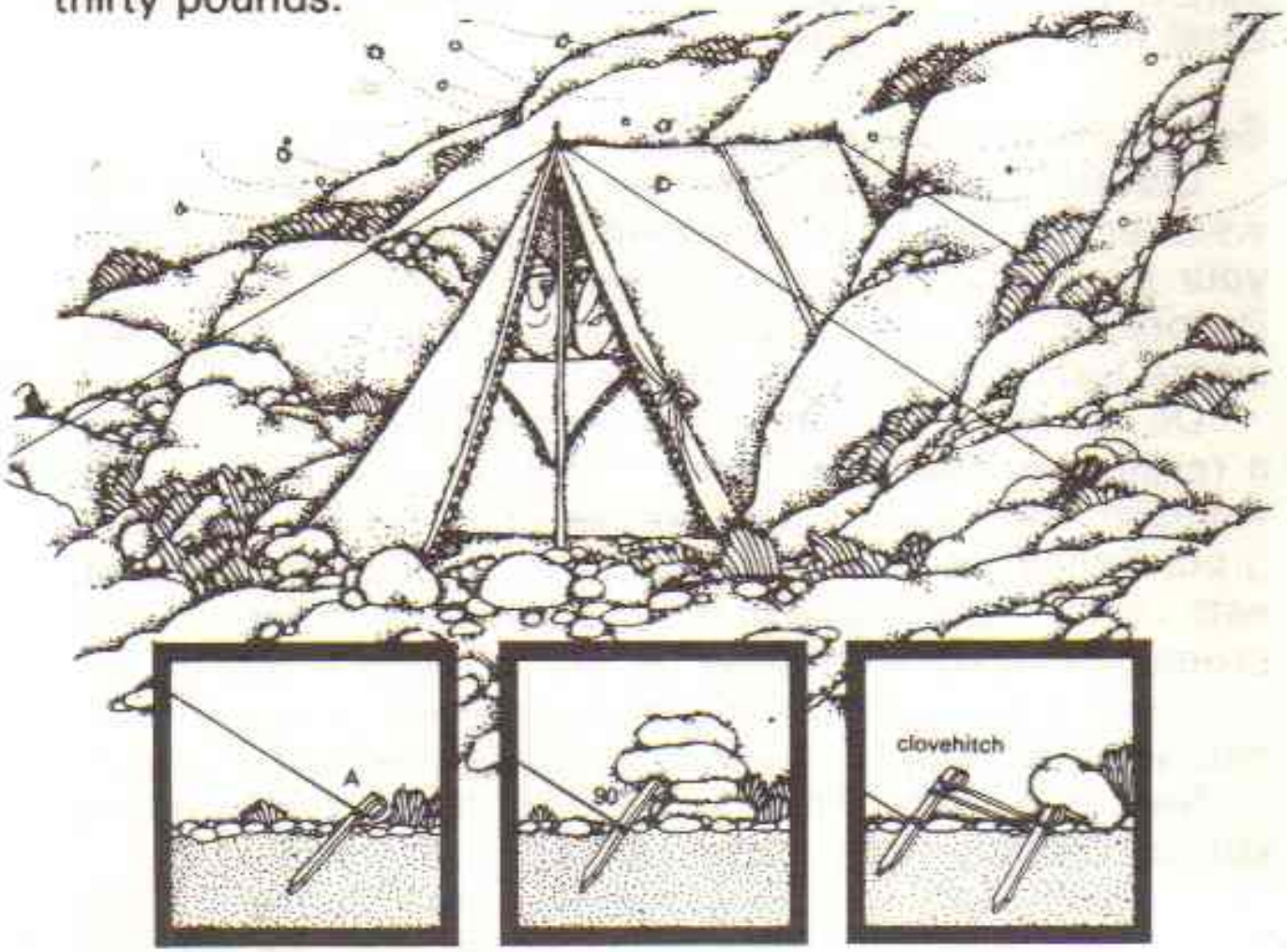
However cold or wet you may be, cook yourself a hot, sustaining meal once you have put on dry clothes. Endeavour to dry out your wet clothing as much as possible

and then wear it during the journey the next day. Keep spare clothing dry as long as possible.

Load Carrying

There have been several instances of people collapsing from exhaustion after attempting to carry too heavy a load in the hills or carrying a load in the wrong way. The basic principles of load carrying are closely related to mountain safety.

- Keep the load as light as possible though still observing the other rules of mountain safety. Remember that younger people should not carry as much as an adult. A useful guide is that the load should not exceed one third of a young person's body weight. Forty pounds should be the absolute maximum and rarely should a load need to exceed thirty pounds.



'Always have angle A greater than 90°'

- Keep the weight of the load high and as directly above the spine as possible. It is much less tiring to have the weight pressing down through the spine than hanging back from your shoulders. A pack frame or a V shape rucsac will be found most effective.
- Keep the load close to the back.
- Make sure that the load is well balanced.
- Remember that carrying a load will tend to upset your balance, so be careful on scree, ridges, or other awkward places, and avoid rock scrambling as much as possible.

Make sure that the rucsac cannot swing easily to your side and so send you off balance particularly when coming downhill. A waist strap will prevent the sack swinging.

A good practice which adds little weight to your rucsac is to purchase a large thick polythene bag. This can then form a good waterproof inner to your rucsac into which your clothing and equipment can be packed. It will not only keep your equipment dry but you will always have ready at hand a useful piece of extra equipment in case of being benighted.

Parties operating from camps in the mountains must appreciate that carrying heavy loads requires a greater energy (food) input and that it is essential to have with you, and eat, a sufficient quantity of carefully selected food before and during a mountain expedition. Particularly in bad conditions it is important to eat well, morning and evening, at camps and to consume energy foods during the day. Lack of sufficient, balanced food prior to and during an expedition could well be an important contribution to cases of mountain hypothermia (exposure, see p. 41).

Safety Precautions Summarised

Before you set out

- Carry a map at least 1:63,360 (1 in) or 1:50,000 in scale.
- Have with you spare warm clothing, especially gloves, balaclava and spare sweater as well as windproof and waterproof outer garments.
- Carry emergency rations (and don't eat them en route!).
- Carry a whistle, torch and small first aid kit in case of accident.
- Leave information of your route and then keep to it. For example, at your Youth Hostel, Hotel, Guest House, or at a Police Station, Information Centre or Mountain Rescue Post, or best, on day trips, at home.
- Until you have a great deal of experience never go out on mountains alone - the safest number is four or more.
- Know where the local Mountain Rescue Posts and nearest telephones are situated.

Planning your route

- Estimate the time that it will take, and make sure that you have sufficient hours of daylight, leaving a wide safety margin for any miscalculation or delay.
- Remember that the weather can change very quickly; if conditions are bad in the valley they will be considerably worse higher up, and a walk that you found easy in summer may be very different in winter. Always plan your route in relation to the prevailing conditions and be very cautious about what you attempt in bad weather.
- Do not overestimate your own stamina or ability.
- Treat the hills with very great respect in snow conditions and do not go up snow-covered mountains unless

you are familiar with snow and ice climbing technique and the use of an ice axe. Plan your day accordingly.

Out on the hills

- Never let anyone get left behind - a party should always stay together, moving at the pace of the slowest.
- Never be afraid of turning back if weather conditions worsen or you realise that the route is too long or too hard for you.
- If you wear boots soled with composition rubber, be sure that you are aware of their limitations - slippery on wet grass, lichened, mossy or greasy rock, ice or hard snow.
- On a steep slope be very careful not to dislodge loose rocks on to those below. When rock scrambling, a party should keep close together so that if a stone is dislodged it will not have had much time to gather momentum should it hit one of the party below. On a scree slope it is best to zig-zag or adopt an arrowhead formation.

On the descent

The majority of mountaineering accidents occur on the descent from a peak when, once the climb is over, there is a tendency to become hasty and careless. Particular points to note are:

- Don't take a short cut - invariably the path takes the safest, easiest and quickest way.
- Always descend the longer, more gradual side of a mountain; scrambling down steep rocky ground can be very dangerous.
- Never run, slide or glissade down a slope unless you can see a clear way to the bottom.
- Do not follow streams downhill. They may end in a waterfall.

If you get lost

Stay together, sit down, keep calm. Carefully work out from the map your approximate position and consider

whether to stop or continue. If the latter, decide in which direction you ought to go, and then trust your compass. If a member of the group is exhausted or if you find that darkness is descending and you are still on the mountain, it is better not to try to get down in the dark unless the whole group can move on and you are on a path or quite certain of the route. Map reading at night is extremely difficult and one cannot tell the difference between a boulder and a precipice. Accept the fact that you are out 'for the night', look around for some shelter from the wind and make yourself as comfortable as possible. You should, of course, be carrying spare clothing and emergency rations.

If the weather and the visibility are good you will be able to decend next morning to another valley. Then get word to your original destination before a search party is sent out.

If at dawn the weather and visibility are poor, so that you feel it is still too dangerous to attempt to move, then give the International Distress Signal in case a rescue party is searching for you.

Emergency Bivouacs

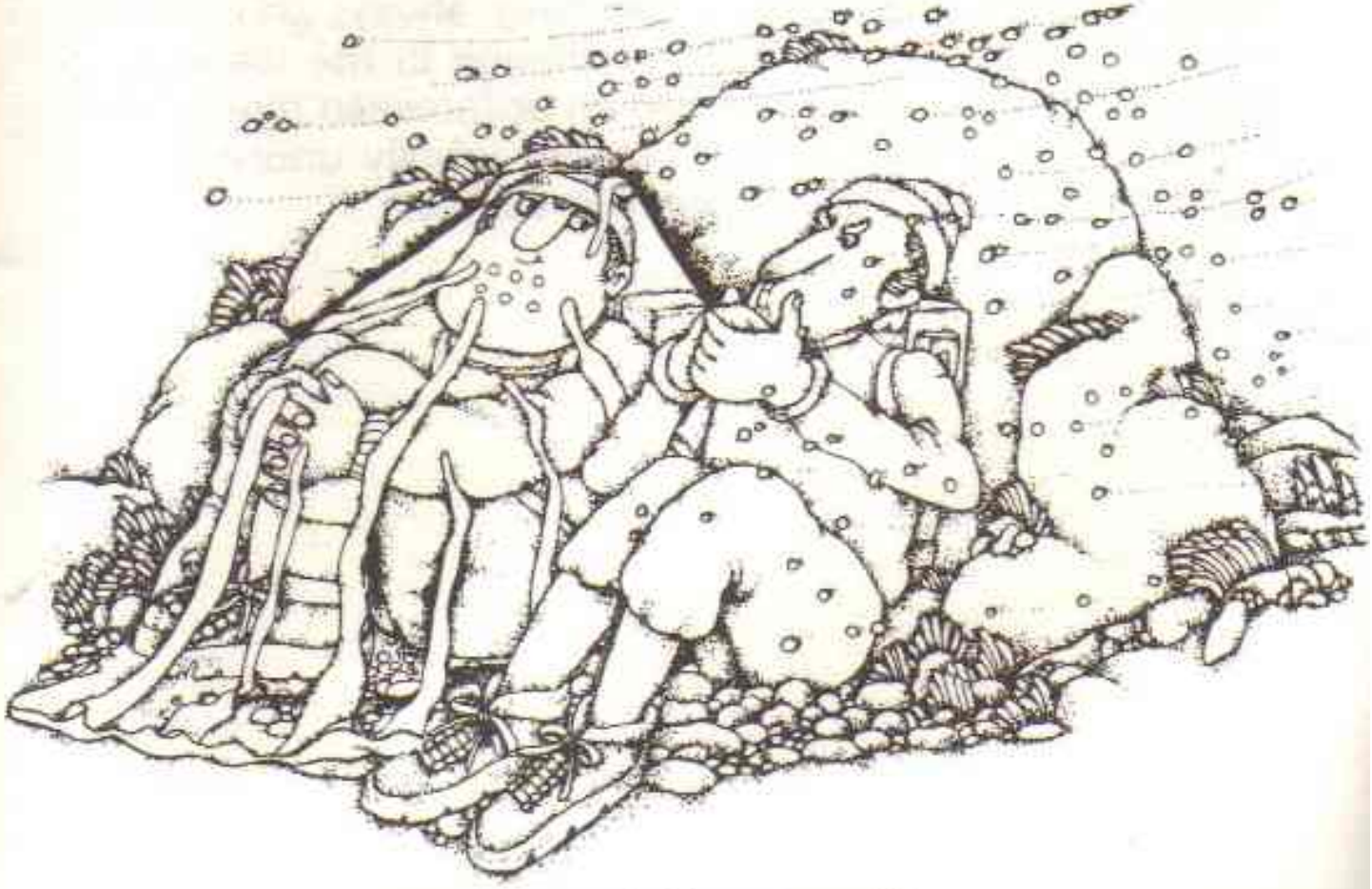
Choose a sheltered spot out of the wind or if necessary build a wind-break out of the rocks.

- Put on your spare clothing with dry clothes next to your skin. Use your rucsac or rope to sit on. A groundsheet, plastic mac, or a thick bag of industrial polythene of not less than gauge 500 will protect you against the wind and rain and it is a good idea always to carry one of these in your rucsac. Bags of this thickness are used regularly in high mountain bivouacs and could in emergency save life in this country. Do *not* use the thin polythene bags that can be bought in most stores for covering clothing or storing blankets.
- If it is very cold, try to stay awake and keep warm by frequently exercising arms and legs. Make sure that none of your clothing is restricting circulation, particularly at extremities. Slacken your boot laces.

Bivouacs on Snow

Snow shelters can provide protection against the weather and much information is now available on their construction in various books and booklets, some of which are listed in Appendix II. The making of snow shelters can be time consuming and if possible a good allowance of time for construction should be made.

- A useful method is to dig or cut a cave into a slope, keeping the entrance small and hollowing the cave out inside with an arched roof. A shelter of this kind will give complete protection from the wind and, once inside, bodily warmth will soon raise the temperature above freezing point.
- If on level snow, excavate a hole 2 ft deep and then use your ice axe to scrape the snow into a compact wall or walls for a wind break. Ice axes and ground sheets can then be used to form a cover or lean-to shelter.



'Choose a sheltered spot!'

Summary

Most accidents in mountains are due to one or more of the following reasons:

- Carelessness
- Over-estimation of one's physical stamina or technical ability
- Lack of observation
- Lack of knowledge
- Failure to act together as a group

This booklet gives a brief outline of the basic knowledge necessary for safe movement in mountain country, and you must now acquire that knowledge and add to it. The many books listed in the bibliography will help in this. Only you yourself can guard against the first two dangers or causes of accidents.

When you go out walking or climbing, always go prepared for the unexpected - a sudden change in the weather, a delay or setback which leads to an unforeseen night out in the open. Remember that if you are wholly unprepared a night out in winter conditions can be fatal.

Procedure - Accident or Illness

- Do any immediate First Aid that is necessary. Stop any bleeding by applying clean dressings and bandaging firmly. If the patient is unconscious, make sure that he is not choking with his tongue blocking the back of his throat.
- Make the patient as comfortable as possible and treat for shock. Keep him warm, putting spare clothing etc. as insulation underneath him. Warm sweet drinks should be given to those who are conscious and suffering from exhaustion or exposure. Never give drinks to anyone with chest, abdominal or head injuries, or any injured patient who may be transported to hospital quickly and put under an anaesthetic. If a long carry of many hours is expected, then warm sugary drinks may be a life saver in case of shock and when no morphia is available. (For further advice on First Aid see following chapter.)
- Give the International Alpine Distress Signal - six blasts on a whistle (or six shouts or flashes of a torch) followed by a pause of a minute then a repetition of the six blasts, shouts or whistles. Keep giving this signal system. If your signals are eventually heard you should hear an answering whistle - three blasts followed by a pause of a minute, repeated several times.

If by any chance your whistle or torch is missing and your voice doesn't carry because of wind, you can wave a white or coloured cloth.

- If your signal does not produce assistance, one (or two if possible) of the party must go down and contact the Police or the nearest Mountain Rescue Post. You should already be familiar with these; they may be marked on maps or listed in rock climbing guide books, though locations sometimes change or should be checked. The

messenger must carry and give the following information concerning the accident.

- Exact position, giving six-figure grid reference or, if this is not feasible, as much information as possible to enable a rescue party to go straight to the injured person. If a rock-climbing accident, he must know the name of the cliff, the route and the pitch, so that the rescue party will know whether to approach from the bottom or the top.
- Time of the accident.
- How many people are injured.
- Nature of the injuries.

If the injured person has to be left alone whilst you fetch help, first give him all your spare clothing to keep him warm. If his injuries permit, move him to a good sheltered position, otherwise erect a wind-break around him. It may be many hours before a rescue party reaches him, the weather may worsen and he may easily die of shock and exposure in the meantime unless you take very careful precautions.

If he is conscious, reassure him and leave him a torch and whistle with which to guide the rescue party to his aid. If unconscious, belay him to a rock if possible to prevent him from falling farther or from wandering off in a dazed condition if he gains consciousness. It is wise to leave a cheering message before you leave him in case he should regain consciousness. If possible mark the position of the patient with a bright piece of clothing and, if you possess a rope, lay it out in a long line so that a party may come across it. A cairn of stones will be better than no position mark at all.

When you have done everything possible for the patient, go and fetch help, descending quickly but carefully.

First Aid

Every party on the hills should carry a first aid pack. This should contain as a minimum:
plasters (for blisters and cuts); lint or gauze (for dressings, etc); Acriflavine cream (antiseptic and soothing cream useful for burns, cuts, etc); aspirin etc (for headaches and pain) and a selection of bandages.

Salt is a very useful commodity in mountains and may sometimes relieve cramp. A solution of salt makes a good dressing for cuts, burns and sprains.

Treatment
Medical treatment is obviously best left in the hands of a doctor or someone highly skilled in First Aid but, if an accident does occur, it may be necessary for an unskilled person to give immediate first aid before a rescue party can be summoned. Every mountaineer should therefore learn at least the rudiments of First Aid, and this can be done through the St. John Ambulance Association, the British Red Cross Society or, in Scotland, the St. Andrew's Ambulance Association.

The notes below are intended purely as a simple guide for the layman faced with a mountain accident.

General Principles
Check the airway. Check it frequently and keep it clear.
- Stop any bleeding and apply dressing to open wounds.
- Do *not* move the patient unless you are quite sure that there is no injury to the spine.

- Treat for shock. Keep warm and relieve pain.
- Immobilize broken limbs to relieve pain and prevent further damage.
- Do *not* experiment. When in doubt, do as little First Aid as possible since an unskilled person can do considerable damage by applying the wrong treatment.

Shock
Shock is present in almost all cases of accident. The symptoms are pallor, weak and rapid pulse, cold, clammy skin, and a hunger for air. Make the patient comfortable and insulate him from the cold ground. Reassure him, allay anxiety and relieve pain. NEVER overheat a shocked patient.

Burns and Scalds
Use a dry sterile dressing on the wound and treat the patient for pain and shock. Leave any adhering clothing on a burn. Remove hot wet clothing from a scald.

Cuts and Wounds
Cut away clothing to make sure there is no dangerous bleeding if it is suspected. Stop any bleeding by applying direct pressure on the wound with a clean dressing or pad and then bandage.

Sprained, Twisted and Dislocated Ankles
In general, do not remove boot - it forms an excellent splint and sufficient relief from swelling can usually be obtained by loosening the laces. If boot is removed apply cold compress and bandage firmly to limit swelling.

Cramp
Massage the affected part and apply warmth. It may sometimes be relieved by drinking a salt solution or eating a few grains.

Frostbite

Early or superficial frostbite is best treated by applying body warmth or breathing on the cold parts until sensation returns. The warm skin of the crutch or the armpit is good or if possible immersing the part in warm water. Once a frostbitten part has been rewarmed, keep it warm. *DO NOT RUB.* Treatment of deep or established frostbite should be delayed until hospital treatment can be given. Protect the parts from rubbing or banging for the tissue is devitalised and will readily tear.

Snakebite

The only poisonous snake in Britain is the adder, but it is a frequenter of hill districts.

- The commonest symptoms are fright and fear of death. Reassurance is vital. *Death from Snake bite is extremely rare.*
- Keep the patient at rest.
- Immobilise the bitten part as for a fracture and apply a firm bandage on the heart side of the bite.
- Administer analgesia (eg. aspirin) but no morphia.

Fractures

Fractures must be immobilized before the patient is carried down on a stretcher, but if you have no experience or training in First Aid, it is probably better not to try to immobilize a fracture before the Rescue Party arrives, unless it is causing the patient extreme pain. Do *not* try to straighten a broken limb.

Arm. Bandage the upper arm to the chest (if splints are available, first bandage these to the arm), and either put the forearm in a sling or bandage it also to the chest, whichever is the more comfortable for the patient.

Leg. Bandage the injured leg to the sound one at the ankles, knees and hips, padding well between the knees,

or bandage the leg to a splint (or ice axe) if available. Avoid moving the injured leg and do not try to straighten.

Collar Bone. Place the hand near the other collar bone and bandage the whole shoulder and arm to the chest.

Spine. On no account move the patient. A spinal injury is often difficult to diagnose, but signs are pain in the back or numbness in the legs. If in the slightest doubt, treat as a spinal injury, and do not move until you have plenty of helpers and a proper stretcher.

Neck. Carefully lay the patient flat on his back. Place a pair of boots, one on each side of the head, with the soles facing outwards and the uppers crossing under the nape of the neck. Narrow triangular bandages can then be tied firmly round the boots and head across the forehead and chin.

Jaw. Support the jaw with the hand, then bandage. Don't allow the patient to lie back or he will choke as he cannot swallow.

Head Injuries

Check the airway frequently and keep it clear. Stop any bleeding by applying a sterile pad and bandaging firmly, then place the patient in the recovery position.

Unconscious Patient

Do *not* administer drinks or morphia. Make sure breating is not obstructed and remove any dentures. Turn the patient on his side in the coma position to prevent the tongue falling back and obstructing the airway and to help the drainage of secretions.

Heat Exhaustion
Reduce temperature by moving into cool shade, using cold water and/or helping respiration by increasing air movement - fanning. Apply preventive action - ie. the giving of salt in solution.

Exposure
Exposure is caused by exhaustion and a severe chilling of the body surface, usually in windy and wet conditions. This is one of the most common reasons for rescue calls in mountains and must be guarded against continually. Additional information can be found in *Mountain Hypothermia,* issued by the BMC.

Signs and Symptoms:
- Complaints of cold, tiredness, cramp.
- Mental and physical lethargy. Lack of understanding of simple questions and directions.
- Slurring of speech.
- Irrational or violent behaviour.
- Abnormality of vision.
- Collapse and coma.

These may not all be present nor in the order given.

All cases should be treated immediately, for mild cases can rapidly become very serious. Suspect others, and yourself, of being mild cases and protect the party from being reduced to the same condition.

Prevention:
- Wear good clothing including windproof and waterproof garments.
- Avoid getting overtired.
- Do not go too long without energy-giving foods.
- If any member of a party is becoming tired, cold and wet, the group should go down into a more sheltered area.

Treatment:
STOP. Provide shelter from the elements causing exposure. Having found a sheltered spot, put up a tent or use the emergency bivouac provided by rucsac and 8 ft × 4 ft 500 gauge polythene bag. Give the patient prolonged rest.
- Immediately insulate the patient from further heat loss. Insulation from the cold ground is particularly important. Cover for head, face and neck is a great help.
- Place the patient in a horizontal position and if possible place a warm companion alongside him.
- Warm food and warm sugary drinks are valuable if the patient is conscious (eg. sugar, glucose, condensed milk).
- Anxiety and mental stress is often an important contributory factor. Be cheerful and encouraging.
- If there is no breathing in severe cases, mouth to mouth resuscitation should be given until normal breathing is obtained.

DO NOT rub the patient to restore circulation.
DO NOT allow further exertion and thereby use up essential energy.
DO NOT give alcohol.

If in any doubt send for help but prompt action, good equipment and good leadership will provide the important safeguards against exposure.

Mountain Rescue

It is the great tradition of all those people who use the mountains and hills for their own pleasure to offer their help in the event of an accident. At least six people at a time are required to carry a stretcher and these six require changing frequently if the carry is to be made with safety. If you feel sufficiently competent and are sure that you will be of help and not a danger, it is your duty to offer your help to the organiser of a rescue party.

There are several mountain rescue teams in the United Kingdom which are well equipped and trained. These include a number of RAF teams whose primary duty is towards those involved in crashed aircraft. Nevertheless, with the civilian teams, they have a fine record of rescue work in our hills.

Some teams are made up at the time of an accident with a nucleus of experienced local mountaineers and others who may be available. Further help is given by the local police. and first aid societies, as well as rescue teams.

The Mountain Rescue Committee have set up a series of first aid posts in the hills, where special stretchers and equipment are kept. In case of accident contact the police or the voluntary post supervisor; they will organise the call-out of available mountaineers or a trained team.

Rescue Posts

Lists of rescue posts, supervisors and other useful information is given in the booklet *Mountain Rescue and Cave Rescue,* available from the Honorary Secretary, The Mountain Rescue Committee, 9 Milldale Avenue, Temple Meads, Buxton, Derbyshire SK17 9BE, price 30p + postage. It is revised annually.

Appendices

APPENDIX I MOUNTAINEERING CLUBS, CENTRES

There are many good local climbing and mountaineering clubs throughout the country which are open to new members and which plan excursions and meets to nearby outcrops and to mountain centres in Britain. To go out with an experienced group of people in a club is an excellent way to learn. If you cannot obtain locally the names and addresses of the nearest clubs, you should write for information to: General Secretary, British Mountaineering Council, Crawford House, Precinct Centre, Manchester University, Booth Street East, Manchester 13. A list of organisations arranging courses or training holidays in mountain activities can be obtained from the same address.

APPENDIX II SELECT BIBLIOGRAPHY

Mountaineering by Alan Blackshaw (Penguin Handbook)
Rock-climbing (Know the Game Series)
Mountain Leadership by Eric Langmuir. Handbook of the MLTB.
Basic and Advanced Rockcraft Royal Robbins (Cordee)
Snow and Ice Climbing Techniques by Bill March (Cicerone Press).
Rock Face by Ron James (BBC Publications).

Camping, Equipment and Information on Walking

Education Pamphlet No. 58: *Camping* (HMSO) 65p.
Camp and Trek by Jack Cox (Lutterworth Press) £1.60.
Expedition Guide (Duke of Edinburgh's Award).
Mid Moor and Mountain by Balsillie and Westwood (Scout Association).

By Map and Compass by C. A. Mustard (Hugh Rees).
Orienteering (Know the Game Series, Education Productions).
Orienteering by John Disley (Faber & Faber)

Mountain Rescue and First Aid

First Aid - Authorised Senior Manual of the BRCS, St. John and St. Andrew Ambulance Associations.
New Essential First Aid (Pan Books).
Mountain and Cave Rescue Mountain Rescue Committee.
Improvised Mountain Rescue Techniques by Bill March.
Mountaineering First Aid Dick Mitchell (Cordee)

Weather and General Information

Understanding Weather (Pelican Books).
Weather by R. S. Scorer, Phoenix House.
Instant Weather Forecasting by A. Watts (Coles).
Britain's Structure and Scenery (New Naturalist Series, Collins) or (Fontana paperback).
The National Parks of England and Wales (Dent) £3.95.
Country Code, booklet, The Countryside Commission (John Dower House, Cheltenham, Gloucestershire).
The Mountain Code British Mountaineering Council.
Satety in Outdoor Pursuits Dept Education and Science
Out and About, Schools Council (Evans Methuen).
Mountain Weather for Climbers, D. J. Unwin (Cordee) in preparation Feb. 1976.
Mountain (56 Sylvester Road, London N2).

APPENDIX III SOME MOUNTAIN FEATURES

	Wales	*Lake District*	*Scotland*
Corrie A mountain armchair hollow	Cwm	Combe Cove	Corrie or Coire
Arête A sharp mountain ridge	Crib or Gribin	Edge	Fiacaill
Cliffs or Crags Steep outcrops of rock on a mountain side	Craig Clogwyn Gallt	Buttress Rock	Craig Creag
Pass or Col A gap in a ridge (narrow or broad) between two peaks or at the head of a valley	Bwlch	Saddle or Hause	Bealach or Lairig
Lakes	Llyn	Tarn Mere Water	Loch or Lochan
Mountain Streams	Afon Nant	Beck Gill	Allt
Peaks or Mountains	Moel Mynydd Glyder Carnedd	Fell Stickle Pike	Sgurr or Ben

Scree
A slope of boulders and small stones on a mountain side

Gully
A broad cleft in rocks and crags or on a steep hillside

APPENDIX IV

MOUNTAIN LEADERSHIP TRAINING BOARD

The first Mountain Leadership Training Board was set up in 1964 to be responsible for training and certification within England and Wales. The Scottish Mountain Leadership Training Board was formed in 1965 and the Board for Northern Ireland in 1969.

The Boards are now administered in England and Wales through the British Mountaineering Council, in Scotland through the Scottish Sports Council and in Northern Ireland through the Sports Council for Northern Ireland. To ensure uniformity the three separate Boards meet together to form the Mountain Leadership Training Boards of the United Kingdom.

The Boards - Their Task and Constitution

The basic task of the Boards is to develop and implement the various schemes of training for those who wish to lead parties of young people on the mountains in the United Kingdom. The general policy is for the normal training authorities, such as local education authorities, colleges of education or voluntary organisations to be encouraged to provide and be entirely responsible for training courses, the Boards ensuring that the content, staffing and other arrangements are of the standard required.

The Purpose and Limitations of the Schemes

The Boards consider that they are prescribing schemes of training and assessing candidates for a single purpose only, that is to lead and, in the case of the more advanced schemes, to instruct, parties of individuals on the mountains.

It is the Boards' responsibility to help those with mountain experience to be trained and assessed so as to lead or instruct parties, especially of young people.

It is not for the Boards but for the employers or other responsible authorities to lay down what overall qualifications or level or experience are to be expected in approving the leadership of parties on the hills or appointing instructors in mountaineering. It is essential, however, that the Boards' certificates be seen quite clearly for what they are - evidence of minimum technical competence for leading or instructing parties or individuals at the various levels.

In short, the Boards cannot teach or assess such qualities as commonsense or such essential attributes as adequate personal knowledge of the particular part of the country where activities are proposed.

It cannot be stressed too much that the use of Certificates as an obligatory qualification for undertakings which are clearly dissociated from the potential hazards of the mountains would be prejudicial to the encouragement of such values and enjoyment of the hills. The various authorities responsible for the employment of leaders or instructors can only make appropriate decisions on these matters given the necessary technical advice.

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Manchester M13 9RZ

Please enrol me as an Associate member for £13.50 inc. subscription to High Magazine.

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Address _____

_____

_____

Signed _____ Date _____

THE MOUNTAIN CODE

Be Prepared

- Do not tackle anything which is beyond your training and experience.
- Ensure that your equipment is sound.
- Know the rescue facilities available in the area you are in and the procedure in case of accidents.
- Know First Aid.
- Avoid going into the mountains alone unless you are very experienced.
- Leave word of your route and proposed time of return. Always report your return.
- Make sure your map and compass skills are well practised. Rely on your compass.

Consider Other People

- Avoid game shooting parties.
- Lead only climbs and walks you are competent to do so.
- Enjoy the quiet of the countryside; loud voices and radios do disturb.
- Do not throw stones and dislodge boulders.
- Do not pollute water.
- Choose a climb which will not interfere with others or wait your turn.

Be Weather Wise

- Know the local weather forcast.
- Weather conditions change rapidly. Do not hesitate to turn back.
- Know the conditions on the mountain; if there is snow or ice only go out when you have mastered the use of ice axe and rope.

Respect the land

- Keep to footpaths through farm and woodland. If in doubt ask.
- Camp on official sites or obtain permission of the landowner.
- Dig a hole to make a latrine and replace the turf.
- Remember the danger of starting a fire.
- Take all your litter home.
- Avoid startling sheep and cattle.

Help Conserve Wild Life

- Enjoy the plants, flowers and trees but never remove or damage them.
- Avoid disturbing wild life.